

Mobile Roughness Measuring Instrument MarSurfM 300

Features

Application:

- On shafts, housing parts
- On large scale machines
- For large workpieces
- On milling and turning parts
- For use on grinding and honing components
- On the production line, or directly upon a machine. ideal for rapid testing of the surface roughness of a workpiece in or on a machine.

Product features:

- MarSurf 300, the first portable roughness measuring unit with the option of wireless (Bluetooth) connection between the evaluation unit and drive unit.
- Bluetooth wireless connection
- Easy to use, with high-resolution color display and ATM-style user guidance
- Integrated standard in drive unit
- Large measuring range, 350 μm
- Automatic profile detection and corresponding selection of filter and traversing length conforming to standards
- Integrated memory for the results of up to 40,000 measurements and 30 profiles
- 16 languages (including 3 Asian languages)
- Integrated thermal graphics printer with high print quality
- Print the R-profile via the thermal graphics printer
- Printed log either by pressing a button or automatically
- Data transfer of results and profiles via USB interface to your PC
- Evaluation of most common parameters as well as characteristic curves, parameter lists (e.g., material ratio curve)
- Integrated memory for results and profiles
- Tolerance monitoring
- Printing of R-profile (ISO/ASME/JIS), P-profile (MOTIF), material ratio curve, measuring record
- Setting of unsymmetric intersection lines for peak count calculation



Order-No.: **6910401**

Technical Data

Measuring principle	stylus method
Probe	Inductive skidded probe
Parameters	Ra, Rz (Ry (JIS) is equivalent to Rz), Rz (JIS), Rq, Rmax, Rp, RpA (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, R3z, RPC, Rmr (tp (JIS, ASME) is equivalent to Rmr), RSm, RSk, S, CR, CF, CL, R, Ar, Rx, Rv
Measuring units	selectable
Measuring range	350 μm
Profile resolution	8 nm
Vertical Scale	automatic/selectable
Horizontal scale	dep. on cutoff
Log contents	R-profile, MRK, P-profile (MOTIF), results
Cutoff l_c according to ISO/JIS	0,25 mm, 0,8 mm, 2,5 mm
Short stroke under ISO/JIS	selectable
Traversing length l_t according to ISO/JIS	1,75 mm, 5,6 mm, 17,5 mm
Evaluation length l_n according to ISO/JIS	1.25 mm, 4 mm, 12.5 mm
Number n of sampling length according to ISO/JIS	selectable: 1-5
Contacting speeds	0.5 mm/s
Stylus	2 μm
Measuring force	approx. 0.7 mN
LC-Display	high resolution color display, 3.5", 320 x 240 pixel
Printing	automatic/manual record with time
Printing speed	approx. 6 lines/second corresponds to approx. 25 mm/s (1 in/s)
Thermopaper	\varnothing 40.0 mm-1.0 mm, width 57.5 mm-0.5 mm, coated
Calibration function	dynamic
Password protection	yes
Lock for device settings	yes
Languages:	German, English, French, Italian, Spanish, Portugese, Dutch, Swedish, Russian, Polish, Czech, Japanese, Chinese, Korean, Hungarian, Turkish
Powermanagement	yes
Interfaces	drive unit, power pack, USB, MarConnect
Data interface	RS232C, USB, Digimatic, USB A
Relative humidity	30 % to 85 %
System of protection	M 300 = IP 42, RD 18 = IP 40
Temperature range for storage	-15 °C to +55 °C
(L x W x H) for Drive unit .	130 mm x 70 mm x 50 mm
(L x W x H) for Measuring instrument .	190 mm x 140 mm x 75 mm

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Weight Drive unit	approx. 300 g
Weight	4,1 kg
Filter according to ISO/JIS	Gauß-Filter, Ls-Filter
Printer	thermal printer, 384 points/horizontal line, 20 characters/line
Operating temp. range	+5 °C to +40 °C
Power supplied	NiMH battery, capacity: approx. 1,000 measurements (dep. on number and length of record printouts), plug-in power pack with three mains plugs, for input voltages from 90 V to 264 V
Weight Measuring instrument	approx. 1 kg

Accessories

Bezeichnung	Typ	Artikel-Nr.
Pick-up extension 80 mm	PHT (80 mm)	6850540
Standard probe	PHT 6-350	6111520
Standard probe 5 µm	PHT 6-350/ 5µm	6111526
Standard probe 10 µm	PHT 6-350/ 10µm	6111527
Probe for bores with a dia. larger than 3 mm	PHT 3-350	6111521
Probe for grooves	PHT 11-100	6111524
Probe for concave and convex surfaces	PHTR-100	6111525
Probe for gear tooth flanks	PHTF 0.5-100	6111522
Probe for metal sheets	PT 150	6111523
Pick-up protection with header vee-block, steel	PHT-ts4	6850715
Adapter for transverse tracing	PHT AQ	6850541
Vee-block holder	PS1 php	6850542
End face vee-block	PS1 / RD18	6910203
Mount for MarSurf PS1/RD18 on measuring stand ST		6910201
Measuring stand 300 mm with cast iron base	ST-D	6710803
Measuring stand 300 mm with granite plate	ST-F	6710806
Measuring stand 300 mm with granite plate and T-slot	ST-G	6710807
Adjustable mounting bracket to connect to 814 SR	814 Sh	2247086
Height Measuring and Scribing Instrument	814 SR	4426100
Height Measuring and Scribing Instrument	814 SR	4426101
Data Connection Cable USB	16 EXu	4102357
Data Connection Cable RS232C	16 EXr	4102410
Digimatic data cable	16 EWd	4102915
Vee-block	PP	6710401
Parallel vice	PPS	6710604
XY Table	CT 120	6710529
Miniature precision vises, set	109 PS	4246819
Evaluation Software	SW PS1/M300 Explorer	6910205
Roughness standard with Mahr calibration certificate	PRN 10	6820420
Geometric Standard with sinusoidal groove profile	PGN 3	6820601
Geometric Standard with sinusoidal groove profile	PGN 1	6820602
Geometric Standard with sinusoidal groove profile	PGN 10	6820605